Patent Claims:

1. Method for stabilizing a car-trailer combination, including a towing vehicle and a trailer moved by the towing vehicle, wherein the towing vehicle is monitored in terms of rolling motions and measures that stabilize driving are taken upon the detection of an actual or expected unstable driving performance of the towing vehicle or the car-trailer combination, c h a r a c t e r i z e d in that the measures that stabilize driving are controlled in dependence on the yaw acceleration.

2. Method as claimed in claim 1, c h a r a c t e r i z e d in that the yaw velocity is determined by means of sensors and the yaw acceleration is derived in a model.

3. Method as claimed in claim 1 or 2, c h a r a c t e r i z e d in that the maximum of the yaw acceleration is determined and the measures that stabilize driving are initiated in dependence on the maximum found.

4. Method as claimed in claim 1 or 2, c h a r a c t e r i z e d in that the measures that stabilize driving are maintained until the yaw acceleration reaches the value zero or a value in a tolerance band around zero.

5. Method as claimed in any one of claims 1 to 4, c h a r a c t e r i z e d in that the measures that stabilize driving are performed in parallel to an ESP control.

6. Method as claimed in any one of claims 1 to 5, c h a r a c t e r i z e d in that the measures that stabilize driving are executed during an ESP control under the condition that the ESP threshold or thresholds is/are modified at which an ESP intervention is introduced or terminated when values exceed or fall short of said thresholds.

7. Method as claimed in claim 6, c h a r a c t e r i z e d in that the ESP threshold is so modified that the ESP intervention is performed only when there is a greater difference between the nominal and the actual yaw velocity.

8. Method as claimed in any one of claims 1 to 7, c h a r a c t e r i z e d in that an ESP brake pre-intervention is performed on at least one wheel as a measure that stabilizes driving.

9. Method as claimed in claim 8, c h a r a c t e r i z e d in that braking pressure in the wheel brakes is maintained in the period between two consecutive ESP brake pre-interventions at the wheels, said braking pressure being rated so that the application travel of the brake remains substantially bridged.

10. Method as claimed in any one of claims 1, 8 or 9, c h a r a c t e r i z e d in that the calculation of the counter torque of the ESP brake pre-intervention to be achieved is established in a correlation to the yaw acceleration according to the following relation:

Counter torque = amplification * $\ddot{\Psi}$.

11. Device for stabilizing a car-trailer combination, including a towing vehicle and a trailer moved by the towing vehicle, wherein the towing vehicle is monitored in terms of rolling motions and measures that stabilize driving are taken upon the detection of an actual or expected unstable driving performance of the towing vehicle or the car-trailer combination, c h a r a c t e r i z e d by an ESP driving stability control with a yaw rate sensor for sensing the yaw velocity and a determining unit, which calculates from the yaw velocity quantities representing the yaw acceleration and being provided to the ESP driving stability control for controlling the braking pressure in the wheel brakes.